NEVADA DIVISION OF ENVIRONMENTAL PROTECTION DRAFT FACT SHEET

(Pursuant to NAC 445A.236)

Permittee: City of Elko

1751 College Ave Elko NV 89801

Permit No.: NEV2003515

Facility: Ruby View Golf Course

Ruby View Dr

Within the city limits of Elko, north of Interstate 80

Latitude: 40° 51' 23" North Longitude: 115° 47' 20" West

T 34N R 55 E S 21

General: This 18 hole golf course is within the city limits of Elko, north of Interstate 80. The site has been irrigated with treated effluent supplied by the City of Elko Water Reclamation Facility (NEV20014) since the mid - 1980s, as authorized by that permit. 120 acres are irrigated. The effluent meets the Category B reuse criteria of NAC 445A.276, with average and maximum fecal coliform concentrations of less than 23 and 240 cfu/100 ml, respectively. A 100 ft buffer zone is required. Since total nitrogen concentrations typically range from 15 to 20 mg/l, the application rate is limited by the nitrogen uptake of the plants. The use of well and spring water in addition to effluent allows the irrigation requirement to be met without exceeding the nitrogen load limit. Fertilizer usage is included in the calculation of the nitrogen load.

Receiving Water Characteristics: The depth to groundwater is in excess of 100 ft. The supply well for the course is located on site and provides water of drinking water quality, with a nitrate concentration of 0.94 mg/l (as nitrogen). The two monitoring wells for the course, G2 and G4, are completed to depths of 109 ft and 55 ft, respectively; and are usually dry. Well G4 has had two detections of total nitrogen as N near or above 10 mg/l. This is not considered representative of the aquifer since the well is mostly dry, and may in fact be intercepting surface runoff. The two existing wells will be replaced.

Rational for Permit Requirements: Application of effluent for irrigation purposes is governed by the water and nitrogen requirements of the plants, and by limitation of human contact based on the concentration of fecal coliform. The Effluent Management Plan (EMP) was approved on 05/28/99 and provides the basis for limits on the annual application volume and nitrogen load; fecal coliform considerations were mentioned previously. Table I.A.2 of the permit contains the effluent limits and is reprinted below.

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Table I.A.2

Parameter	Discharge Limitations		
	30 Day Average	Monthly Total	Monitoring Requirements
Application Rate	monitor & report (MGD) (1)	monitor & report (MG/month) (2)	flow meter
Annual Application Volume	876 acre · ft/yr ⁽³⁾⁽⁴⁾		flow meter
Annual Nitrogen Load	210 lb N/acre · yr ⁽⁵⁾		calculation

- (1) For the purpose of determining the fees required by NAC 445A.232, 0.5 MGD < 876 AFY < 1 MGD
- (2) Monthly application rates in the Effluent Management Plan (EMP) shall be used as a guide.
- (3) 110% of estimated irrigation requirement from the EMP.
- (4) Report cumulative yearly total in each Discharge Monitoring Report (DMR).
- (5) Annual nitrogen load limit includes effluent and fertilizer.

Monitoring wells are intended to detect impacts to groundwater from reuse or disposal of effluent. Table I.A.3 of the permit contains the requirements for monitoring wells and is reprinted below.

Table I.A.3

	Groundwater	Monitoring Requirements	
Parameters	Limitations	Measurement Frequency	Sample Type
Groundwater Elevation and Depth to Water, ft	m & r ⁽¹⁾	quarterly	measurement
Nitrate as N, mg/l	10 ⁽²⁾	quarterly	discrete
Total Kjeldahl Nitrogen as N, mg/l	m & r	quarterly	discrete
Total Nitrogen as N, mg/l	m & r	quarterly	discrete
Total Dissolved Solids, mg/l	m & r	quarterly	discrete
Chloride, mg/l	m & r	quarterly	discrete

- (1) Monitor and report.
- (2) See Part I.A.4.

Schedule of Compliance: A plan for replacement of existing monitoring wells G2 and G4 will be due on the 6 month anniversary of the permit.

Procedures for Public Comment: Notice of the Division's intent to issue discharge permit NEV2003515 authorizing irrigation with treated effluent at Ruby View Golf Course is being sent to the **Elko Daily Free Press** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to

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comment on the proposed permit must submit written comments to the Division within (30) days of the publication date. The comment period can be extended at the discretion of the Administrator. The deadline for receipt of all written comments is Tuesday February 10, 2004 by 5:00 pm. Comments postmarked prior to that deadline will also the accepted.

A public hearing on the proposed determination can be requested by the applicant, any affected state or interstate agency, the Regional Administrator, or any interested agency, person, or group of persons. The request must be filed within the comment period and indicate the interest of the person filing the request and the reasons why a hearing is warranted. Any public hearing the Administrator determines to be hold must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

Proposed Determination: The Division has made the tentative determination to issue the proposed discharge permit for a five year term.

Prepared by: Robert J. Saunders

Staff Engineer

Bureau of Water Pollution Control

December 29, 2003